



Department of Energy

Idaho Operations Office
850 Energy Drive
Idaho Falls, Idaho 83401-1563

June 14, 2001

Mr. Wayne Pierre, Team Leader
Environmental Cleanup Office
U.S. Environmental Protection Agency
Region X
1200 Sixth Avenue
Seattle, Washington 98101

Mr. Dean Nygard, Site Remediation Manager
Waste Management and Remediation Division
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

SUBJECT: CONTRACT NO. DE-AC07-99ID13727 - DISPOSAL OF WAG 5 ARA-13 SEPTIC WASTE AT THE RADIOACTIVE WASTE MANAGEMENT COMPLEX (OPE-EM-ER-01-103)

Dear Mr. Pierre & Mr. Nygard:

The radiologically contaminated septic tank sludge from Waste Area Group (WAG) 5 Operable Unit (OU) 5-11, Auxiliary Reactor Area (ARA)-13, ARA-III Sanitary Sewer Leach Field and Septic Tank (ARA-740), has been removed to the Radioactive Waste Management Complex (RWMC) low-level waste repository, which is located at the Idaho National Engineering and Environmental Laboratory (INEEL), for disposal. This is consistent with the OU 5-12 Record of Decision (ROD)¹.

Waste Area Group 5 is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)² designation for the INEEL Auxiliary Reactor Area and the Power Burst Facility. Operable Unit 5-12 is the comprehensive OU for WAG 5. Section 11 of the OU 5-12 Comprehensive ROD identified disposition of the ARA-13 site: "The septic tank will be removed or filled with earthen materials and abandoned in place in accordance with State of Idaho standards (IDAPA 16.01.03.007.23)." The ARA-13 distribution box contained polychlorinated biphenyls (PCBs) regulated under the Toxic Substances Control Act (TSCA). The contents of the distribution box were removed, mixed with grout, and will be sent to Envirocare for disposal. The liquid phase of the ARA-13 septic tank was pumped out of the septic system and sent to the Central Facilities Area (CFA) Sewage Treatment Plant for disposal. The ARA-13 septic tank had approximately 6 m³ (211.8 ft³) of septic tank sludge. This sludge was removed, solidified with grout, and placed into a soft-sided container.

¹ U.S. Department of Energy Idaho Operations Office, U.S. Environmental Protection Agency, Idaho Department of Health and Welfare, January 2000, *Record of Decision, Power Burst Facility and Auxiliary Reactor Area, Operable Unit 5-12 Idaho National Engineering and Environmental Laboratory*, Idaho Falls, Idaho.

² 42 USC § 9601 et seq., December 11, 1980, "Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA/Superfund)," *United States Code*.

The ARA-13 sludge has low levels of radionuclide contamination. The radionuclides identified in the sludge were C-14 (ranging from 0–2.19E-07 nCi/g), Co-60 (ranging from 0–2.19E-04 nCi/g), Cs-137 (ranging from 0–1.82E-04 nCi/g), Fe-55 (ranging from 0–2.19E-04 nCi/g), Ni-63 (ranging from 0–2.19E-06 nCi/g), Pm-147 (ranging from 0–5.24E-02 nCi/g), Ra-226 (ranging from 0–9.13E-04 nCi/g), and Sr-90 (ranging from 0–2.1E-7 nCi/g). This waste stream was classified as low-level radioactive waste, and the evaluation determined that it met the INEEL waste acceptance criteria. Therefore, disposal in the RWMC is allowed under regulations. Furthermore, any contaminants that could potentially migrate to groundwater have been stabilized with grout, eliminating any potential risk from this waste.

The active portion of the RWMC is considered a low-level radioactive waste disposal unit, operated by the U.S. Department of Energy (DOE) under the Atomic Energy Act³, as amended. Operations at the RWMC are governed by DOE orders. DOE Headquarters has determined that the RWMC complies with DOE orders and that the facility is authorized to operate.

The decision was made to dispose of the sludge at the RWMC because the INEEL CERCLA Disposal Facility (ICDF) is not yet open and there is limited space in the Staging and Storage Annex (SSA).

If you have any questions or comments regarding this document, please contact Carol Hathaway at 208-526-4049 or myself at 208-526-4392.

Sincerely,

Carol A. Hathaway

For: Kathleen E. Hain, Manager
Environmental Restoration

Enclosures

Cc: Rick Poeton, EPA, 1200 Sixth Avenue, Seattle, WA 98101;
Ted Livieratos, IDHW DEQ;
A. Kluk, HQ;

³. 42 USC 2201 et seq., *United States Code*, Atomic Energy Act of 1954, August 13, 1954.

File: 6400.5.12
OPE-ER-01-103

bcc: (w/o Encl)
IR File, Steve Baker MS 3915
Steven Wilkinson, MS 3950

ID DISTRIBUTION:

CONCURRENCE:

K. Hain (OPE/ER), MS 1117, w/enc.
C. Hathaway (OPE/ER, MS 1117, w/enc

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RECORD NOTES:

1. This letter was written to transmit the justification for the disposal of low-level waste (piping and soil) from ARA-13 at the RWMC.
2. C. Hathaway (OPE/ER) wrote this letter for signature by K. Hain (OPE-ER).
3. This letter closes CATS number N/A.
4. The attached correspondence has no relation to the Naval Nuclear Propulsion Program. Naval Reactors concurrence is not required.